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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,553	03/19/2002	Motoya Iwasaki	A253-1	6682

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EXAMINER

DEPPE, BETSY LEE

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 01/26/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/088,553

Applicant(s)

IWASAKI, MOTOYA

Examiner

Betsy L. Deppe

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2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,5,7,8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 1(c), 7 and 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because it contains the form and legal phraseology often used in patent claims (i.e. "comprised" on line 2) and the first occurrence of "the" in line 7 should be deleted. Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities:
on page 8, lines 16 and 26, "o" should be "0";
on page 9, line 11, "o" should be "0";

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on page 13, line 21, one of the occurrences of " $(M + K)$ " should be " $(M \times K)$ ";

on page 14, line 15, "Fig. 1(c)" should be "Fig. 1(b)."

Appropriate correction is required.

Claim Objections

5. The claims are objected to because of the following informalities:

in claim 1, lines 3-4, "which is comprised . . . a second sub-correlator," should be deleted because it is redundant;

in claim 1, line 8, the first occurrence of "detects correlation" should be deleted because it is redundant;

on line 6 of claims 4-6, "o" should be "0";

in claim 4, line 4, "symbol" should be "symbols" (see line 9);

in claim 4, lines 9-10 are grammatically awkward;

in claim 4, line 11, "fixed word" should be "fixed pattern";

in claim 5, line 9, "per a" should be "per";

in claim 5, lines 9-15 are grammatically awkward;

in claims 5 and 6, "K symbol" (see claim 5, line 4) and "K symbols" (see claim 5, line 13) are recited. Are they referring to the same thing? If so, the same terminology should be used for clarification.

in claim 6, lines 9-18 are grammatically awkward;

claims 14 and 15 are grammatically awkward;

on line 7 of claims 22-23, "o" should be "0";

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in claim 21, lines 4-5, "which is comprised . . . a second sub-correlator," should be deleted because it is redundant;

in claim 21, line 9, the first occurrence of "detects correlation" should be deleted because it is redundant;

in claim 22, lines 10-12 are grammatically awkward;

in claim 23, lines 10-16 are grammatically awkward;

in claim 24, line 8, "o" should be "0";

in claim 24, lines 11-20 are grammatically awkward;

in claim 25, lines 4-6 are grammatically awkward; and

in claim 26, lines 4-9 are grammatically awkward.

Appropriate correction is required.

6. Claims 18-20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 18-20 are replacing a limitation in the respective independent claims instead of adding another limitation.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 2-20 and 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. It is unclear what is meant by the limitation recited in claims 2, 8 and 9, respectively. For example, how is the first sub-correlator included "by one"? Furthermore, line 2 recites "said second sub-correlators" while there is only one second sub-correlator recited the respective independent claims (for example, in claim 1, line 8). It is unclear whether there is a single second sub-correlator or multiple sub-correlators.

10. Claims 3, 10 and 11 recite the limitation "each of said second sub-correlators" in line 4. There is insufficient antecedent basis for this limitation in the respective claims.

11. In claim 4, lines 9-10, it is unclear what is meant by "receives data corresponding to K symbols, about a correlation value output from said first sub-correlator."

12. With regard to claims 4-20 and 22-26, the respective independent claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example, in claim 4, it is difficult to understand what comprises the input signal to the first sub-correlator and what is being correlated.

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Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1, 4, 21, 22, 25 and 26 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Davidovici et al. (US Patent No. 6,393,049 B1). (See Figure 1; column 3, lines 15-60; column 5, lines 27-43; and column 6, lines 15-54)

15. Claims 1, 4, 21, 22, 25 and 26 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Moon (US Patent No. 6,539,047 B1). (See Figure 7 and column 9, lines 17-58)

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references disclose spread spectrum receivers that detect header/pattern from a correlated signal: Kurihara et al. (US Patent No. 4,943,975), Shoji (US Patent No. 5,844,935) and Davidovici (US Patent No. 5,894,494).

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (703) 305-4960. The examiner can normally be reached on Monday, Tuesday and Thursday (8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (703) 305-4714.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 305-4700.



Betsy L. Deppe
Primary Examiner
Art Unit 2634
January 13, 2004